

SUMMER OF 2001 FORECASTED ELECTRICITY DEMAND AND SUPPLIES

STAFF REPORT

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Gray Davis, Governor

CALIFORNIA ENERGY COMMISSION

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2001 Summer Peak Demand/Resource Forecast California ISO Control Area (MW)

Temperature Conditions		<u>1 in 2</u>	<u>1 in 5</u>	<u>1 in 10</u>
2001 Forecasted Peak Demand		47,266	48,845	50,068
2001 Forecasted Peak + 5% Operating Reserve		49,476	51,056	52,278
2001 Forecasted Peak + 7% Operating Reserve		50,303	51,882	53,104
 2001 Peak Resources				
§ Existing Generation	45,025			
§ Firm New Additions	1,849			
§ Allowance for Outages	(2,500)			
§ California-Controlled				
Out-of-State-Resources	2,046			
§ Firm Imports	4,054			
§ Firm Exports	(725)			
§ Market Exports	(542)			
§ Excess Capacity From				
LADWP Control Area		1,222	898	832
§ Curtailable Load	2,150			
Total Resources		52,579	52,255	52,189
 Total Potential New Additions		 1,888 — 3,087		
 Total Emergency Resources		 1,815 — 2,190		

Potential New Additions

Huntington Beach 3 — 4 (return to service)	440
ISO CT RFB Projects	198 — 397
State of CA., Dept of General Services	
Distributed Generation - New Energy	
Efficiency Programs	200
U.C. Irvine Cogeneration	50
Imports: POWEREX (BC Hydro)	1,000 — 2,000
Total Potential New Additions	1,888 — 3,087

Emergency Resources

SMUD Cycling Program	100
Voluntary Load Curtailment	
California Grocers (Tested August 2000)	100
State of California (Tested August 2000)	180
Federal Govt., Cities & Counties,	
and Addtl. Grocers	120
Maximum output from existing generation	690
Emergency Assistance BPA (Per BPA)	300 - 400
Emergency Assistance WAPA (Per WAPA)	325 - 600
Total Emergency Resources	1,815 — 2,190

Backup for ISO Summer 2001 Load-Resource Balance Table

ISO Control Area Load Forecast Summer 2001 With Peak Demand Adjustments*

	1 in 2 Year	1 in 5 Year	1 in 10 Year
(CEC Draft Forecast 10/16/2000)	47,486	49,065	50,288
Peak Demand Reduction Programs			
CPUC Public Goods Charge Programs	(67)		
CEC AB 970 (Dependable Savings)	(153)		
Adjusted ISO Control Area Load	47,266	48,845	50,068

*Loads include all municipal utilities except LADWP, City of Glendale, City of Burbank, and Imperial Irrigation District. Summer 2000 adjusted peak was 45,494 (August 16, 2000).

Calculation of Operating Reserves

Existing Generation	45,025		
CA Controlled Out-of-State Resources	2,046		
New Additions	1,849		
Allowance for Outages	(2,500)		
Available Generation	46,420		
Operating Reserve 5% of Avail. Gen.	2,210		
Operating Reserve 7% of Avail. Gen.	3,037		
Total Load + 5% Reserve	49,476	51,056	52,278
Total Load + 7% Reserve	50,303	51,882	53,104

California Controlled Out-of-State Resources

Palo Verde 1 — 3	
CA Utility Ownership Shares	
SCE	597
Pasadena	10
Riverside	12
SCE Other	7
Vernon	11
Yuma Cogen	53
Four Corners 4 - 5	710
Total	1,400
Hoover	
CA Utility Entitlements	
Anaheim	40
Azusa	4
Banning	2
Colton	3
Metro Water District	248
Pasadena	20
Riverside	29
SCE	278
Vernon	22
Total	646
Total	2,046

**Firm New Additions
(Summer Ratings)**

Los Medanos (7/1/01)	467
Sutter (8/01/00)	467
Sunrise CT (8/01/01)	285
Procter & Gamble CT - SMUD (6/01/01)	44
United Golden Gate CT (8/01/01)	45
Vineyard CT	47
Pleasanton CT	45
East Livermore CT	48
Chula Vista CT	37
Escondido CT	37
Incremental output from Existing Qualifying Facilities	80
Renewable Energy Projects (Existing CEC Program)	96
New Energy Renewable Projects (AB 970 Funding)	152
Total Firm New Additions	1,849

Firm Imports

Muni Owned Generation	
San Juan 3 - 4	273
Reid Gardner 4	180
Intermountain 1 - 2	414
Parker - Metro Water District	51
Total	918

Northwest Contracts	
BPA to CA Munis	230
BPA to SCE	500
Longview Fiber to Wstrn Mid-Pac.	43
Deseret G&T To CA Munis	92
Idaho Power to CA Munis	14
Boardman to TID	51
PNW Generating Co. to TID	52
PacifiCorp to Redding	50
PacifiCorp to SMUD	100
PacifiCorp NW to SCE	100
PacifiCorp Utah to SCE	100
PacificCorp NW to Wstrn Mid-Pac	250
PacificCorp NW to CDWR	200
Portland Gen. Elec. to SCE	300
Portland Gen. Elec. to SDG&E	75
Portland Gen. Elec. To Wstrn Mid-Pac	65
Puget Sound P&L to PG&E	300
Seattle City Light to NCPA	60
Seattle City Light to PG&E	100
Snohomish to SMUD	42
Tacoma PUL to Wstrn. Mid-Pac.	41
Wash. Water & Power to TID	18
Wash. Water & Power to PG&E	225
LADWP to CDWR	77
LADWP to TID	51
Total	3,136
Total Firm Imports	4,054

Mohave to LADWP (Based on Summer Dep. Cap. Of 1387 MW)	(277)
Mohave to Nevada Power	(194)
Mohave to Salt River Project	(139)
SCE to Arizona Public Service	(5)
SCE to Tucson Electric Power	110)
Total Firm Exports	(725)

Derivation of Market Export Estimate

Ca. Controlled Imports	2,046
Firm Imports	4,054
Firm Exports	(725)
Net Firm Imports (B)	5,374

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**Excess Capacity from LADWP Control Area
(LADWP, Glendale, Burbank)
Summer 2001**

	1 in 2	1 in 5	1 in 10
Total Load (CEC Draft Demand Forecast 10/16/2000)	6,169	6,471	6,533
LADWP DSM Program	(10)		
Sales			
LADWP to CDWR	77		
LADWP to TID	51		
	6,287	6,589	6,651
(In-State and Out-of-State) Thermal			
LADWP (LADWP 2000 Integrated Resource Plan)	5,170		
Burbank	313		
Glendale	297		
Self Generation - in LADWP Control Area	338		
	6,118		
Allowance for outages (6%)	(367)		
Total	5,751		
LADWP Hydro	1,948		
Firm Contracts and Entitlements			
BPA to Burbank - Glendale	130		
Portland General Electric - Burbank - Glendale	80		
Burbank Hoover Entitlement	20		
Glendale Hoover Entitlement	20		
	250		
Total Resources	7,949		
Total Load + 7% Reserve	6,727	7,050	7,116
Potential Excess Capacity to Sell to CA ISO	1,222	898	832

New Generation Additions - Other Western States

On-line as of August 1st	2001	2002	2003	2004	Total
Baja Mexico					
Net New Adds/Retirements	612	419	1,079	0	2,110
Arizona, Nevada, New Mexico					
Net New Adds/Retirements	1,526	960	4,473	4,036	10,995
Northwest					
Net New Adds/Retirements	465	1,507	460	2,697	5,129
Rocky Mountains					
Net New Adds/Retirements	643	80	282	0	1,005
Alberta, British Columbia					
Net New Adds/Retirements	821	250	661	(216)	1,516
Total	4,067	3,216	6,955	6,517	20,755